

REMARKS

Entry of the foregoing, re-examination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.112, and in light of the remarks which follow are respectfully requested.

By the present amendment, claim 1 has been amended to add the feature of canceled claim 11. Thus, claim 1 as currently amended is directed to an adhesive comprising a filler and a prepolymer mixture of at least one prepolymer having polycarbonate radicals and a prepolymer which does not contain carbonate radicals and is based on a polyol, preferably a polyetherpolyol. The concept of an adhesive which includes a prepolymer mixture comprising a polycarbonate-containing prepolymer and a non-polycarbonate prepolymer derived from a polyol is discussed on page 7, lines 1-14 and is exemplified in formulations 1-3 of Table 1 on page 11 of the specification.

The specification has been amended to correct an obvious omission. It is clear from the preceding words that the sentence should have read in part --at least 3% by weight, preferably at least 10% by weight.--

New claims 19-29 are directed to preferred ranges and ingredients removed from the original claims in response to the §112 rejection. Claim 22 is also directed to an embodiment in the formulations of Table 1 wherein the non-carbonate prepolymer comprises a reaction product of a polyetherpolyol and a polyisocyanate. New claim 30 is

directed to a preferred formulation and claim 31 to a product prepared by the method of claim 18.

Claims 1-10 and 12-31 are now pending in this application. Claims 16 and 18 have been withdrawn from consideration.

Turning to the Office Action, the Examiner has rejected claims 1-15 and 17 under 35 U.S.C. §112, second paragraph, for the reasons given on page 2 of the Action.

Reconsideration is respectfully requested of this rejection in view of the above amendments and the reasons which follow.

The currently amended claims are believed to be free of terminology such as "in particular", "more preferred", "preferably", "respective carbonate" (claim 1) and "structure forming agent" (claim 9). Claim 12 has been amended to correct the term "20,000".

Regarding the objection to claim 2, the term "component" in that context refers to the packaging scheme for the adhesive. In a one-component system, all ingredients are packaged together. In a two-component system, at least some of the ingredients (e.g. curing agent) are packaged separately from other components of the adhesive. Note the discussion in the specification on page 6, lines 31-33 and page 8, line 30 to page 9, line 11.

Applicants believe the §112 rejection has been obviated. Accordingly, withdrawal of the rejection is requested.

Claims 1-10, 14 and 17 were rejected under 35 U.S.C. §102(b) as anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 4,996,283

to Greco et al. The Examiner's reasons are set forth on page 3 of the Office Action.

Reconsideration of these rejections is requested for at least the following reasons.

Greco et al '283 does not disclose or suggest adhesives which include a prepolymer based on a non-polycarbonate polyol as well as a prepolymer containing a polycarbonate radical as set forth in the present claims. Such a combination of two different types of prepolymers is beneficial because while resulting in a degree of incompatibility, the mixture still remains homogeneous. This combination serves to enhance antenna impedance properties, an advantage not recognized in the '283 document.

In view of the foregoing, the §102(b) and §103(a) rejections over Greco et al '283 should be withdrawn. Such action is earnestly solicited.

Claims 1-10, 14 and 17 were rejected under 35 U.S.C. §103(a) as unpatentable over Greco et al '283 in view of U.S. Patent No. 5,288,797 to Khalil et al for reasons provided on page 3 of the Office Action. Reconsideration of this rejection is requested for at least the following reasons.

Khalil et al '797 has been relied upon solely to show the use of carbon black in adhesives within the range of 6-24 wt. %. This document does not disclose or suggest prepolymer blends as defined in the present claims. Accordingly, the combined teachings of Greco et al '283 and Khalil et al '797 fail to render obvious the presently claimed invention. In view thereof, the §103(a) rejection based on these documents should be withdrawn.

Claims 1-6, 8-15 and 17 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 4,107,386 to Gruber et al for reasons expressed on page 4 of the Office Action. Reconsideration of these rejections is respectfully requested for at least the following reasons.

Gruber et al '386 is directed to the preparation of anaerobic adhesives containing acrylates bridged with polycarbonate chains. These acrylates are not prepolymers in the sense that the term is used in the present application. They are cured by addition polymerization using organic peroxide initiators in admixture with other ethylenically unsaturated comonomers such as polyethyleneglycol-dimethacrylate.

On the other hand, in the formulations of the present invention, curing is effected by moisture and/or diamines, diols, etc. Also, the adhesives of the reference are not disclosed as suitable for antenna-containing windscreen glazing.

For at least these reasons, the adhesives disclosed in Gruber et al '386 are not anticipatory of the claimed formulations nor do they render obvious the presently claimed invention. Accordingly, the §§102(b) and 103(a) rejections over Gruber et al '386 should be reconsidered and withdrawn.

Claims 1-15 and 17 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over JP 02-003489 for the reasons provided on page 4 of the Office Action. Reconsideration of these rejections is respectfully requested for at least the following reasons.

JP '489 appears to be directed to a polyurethane adhesive consisting of a prepolymer prepared from a polyisocyanate of formula (III) and a polymer precursor of formula (I) or (II). Formula (I) is an alkylene diol and formula (II) is a polyester. Polycarbonate is mentioned as a suitable substrate. For the formation of the polyester of formula (II) from a dicarboxylic acid and diol, polycarbonatediol is mentioned as a suitable diol. Nevertheless, this is still a polyester. Therefore, reference to polycarbonate (underlined by the examiner) refers to the polyester backbone and not the polyol directly used for the preparation of the prepolymer. Furthermore, although fillers are disclosed in an amount of 5-75%, carbon black is not mentioned.

JP '489 does not appear to disclose adhesive compositions comprising a prepolymer with polycarbonate radicals, a prepolymer based on non-carbonate polyol, and a conductive filler. Further, the adhesives of this reference seem to rely on a totally different curing mechanism than the presently claimed adhesives nor were the problems faced by the inventors of JP '489 related to the windscreen antenna problems solved by the present invention.

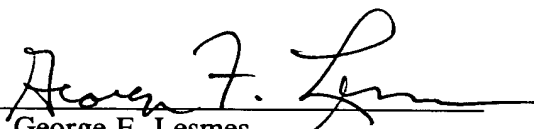
For at least the above reasons, the §§102(b) and 103(a) rejections over JP '489 should be reconsidered and withdrawn. Such action is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned at (703) 838-6683 at his earliest convenience.

Respectfully submitted,

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